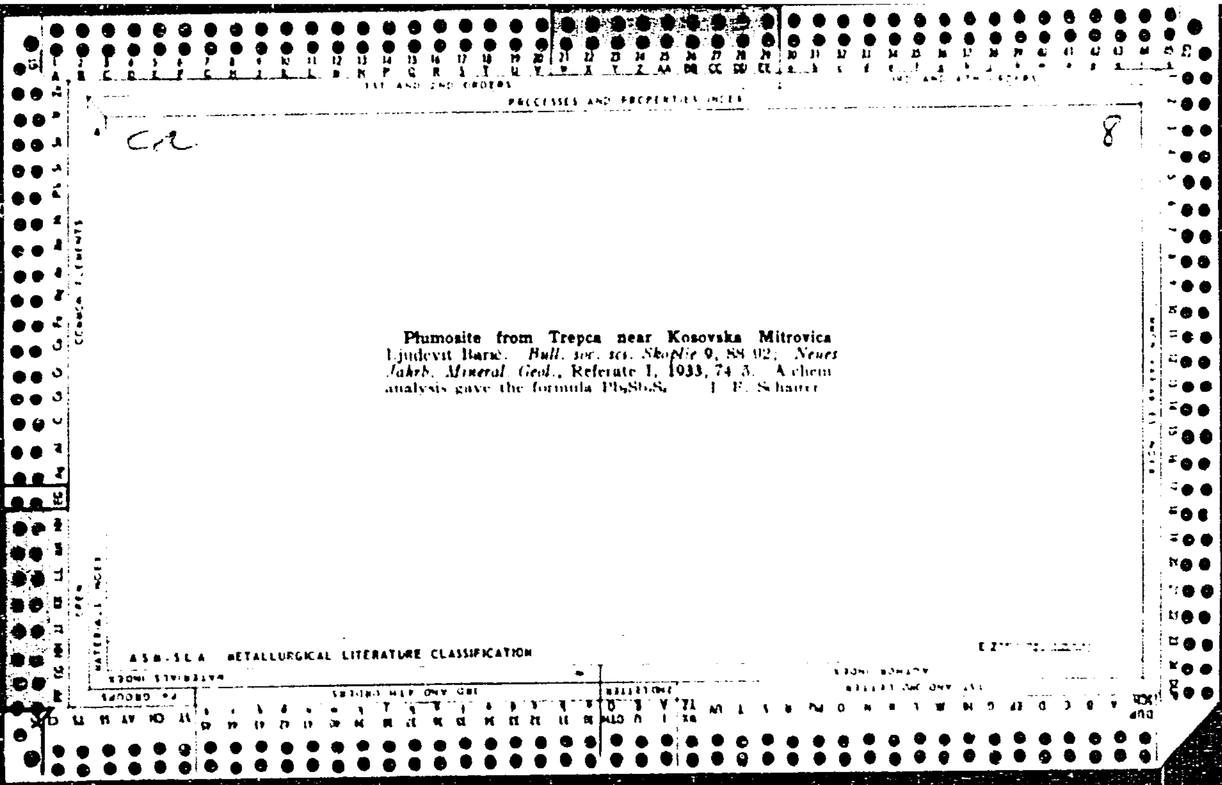
BARIC, Ivan

Comparative studies of the food of harvesters in Vojvodina and the Kosovo-Metohija Province. Zbor prir Mat srp no.20:116-126 '61.



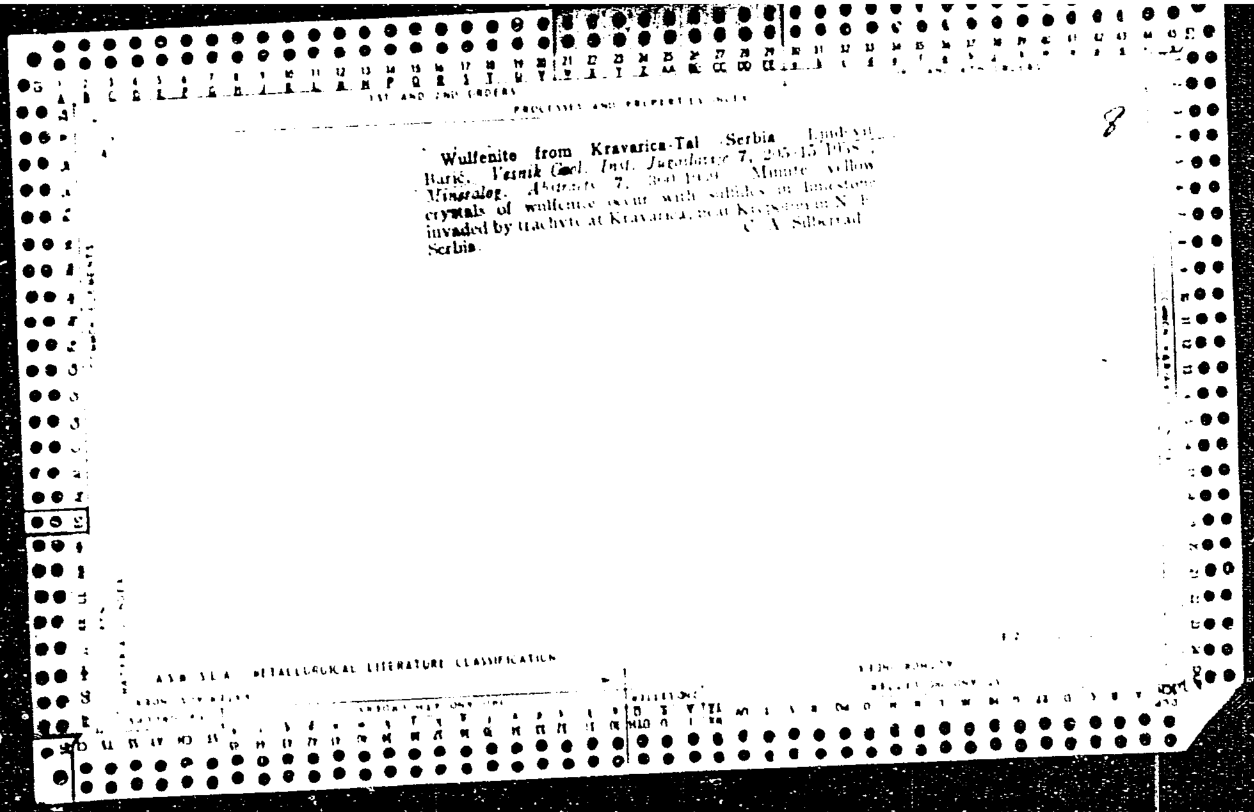
PROCESSES AND PROPERTIES INDEX

Cr

8

Plumosite from Trepca near Kosovska Mitrovica
Ljudevit Barić. *Bull. soc. sci. Skoplje* 9, 88-92; *Neues Jahrb. Mineral. Geol.*, Referate I, 1933, 74-5. A chem. analysis gave the formula $Pb_2Sb_2S_5$. J. F. Schairer

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



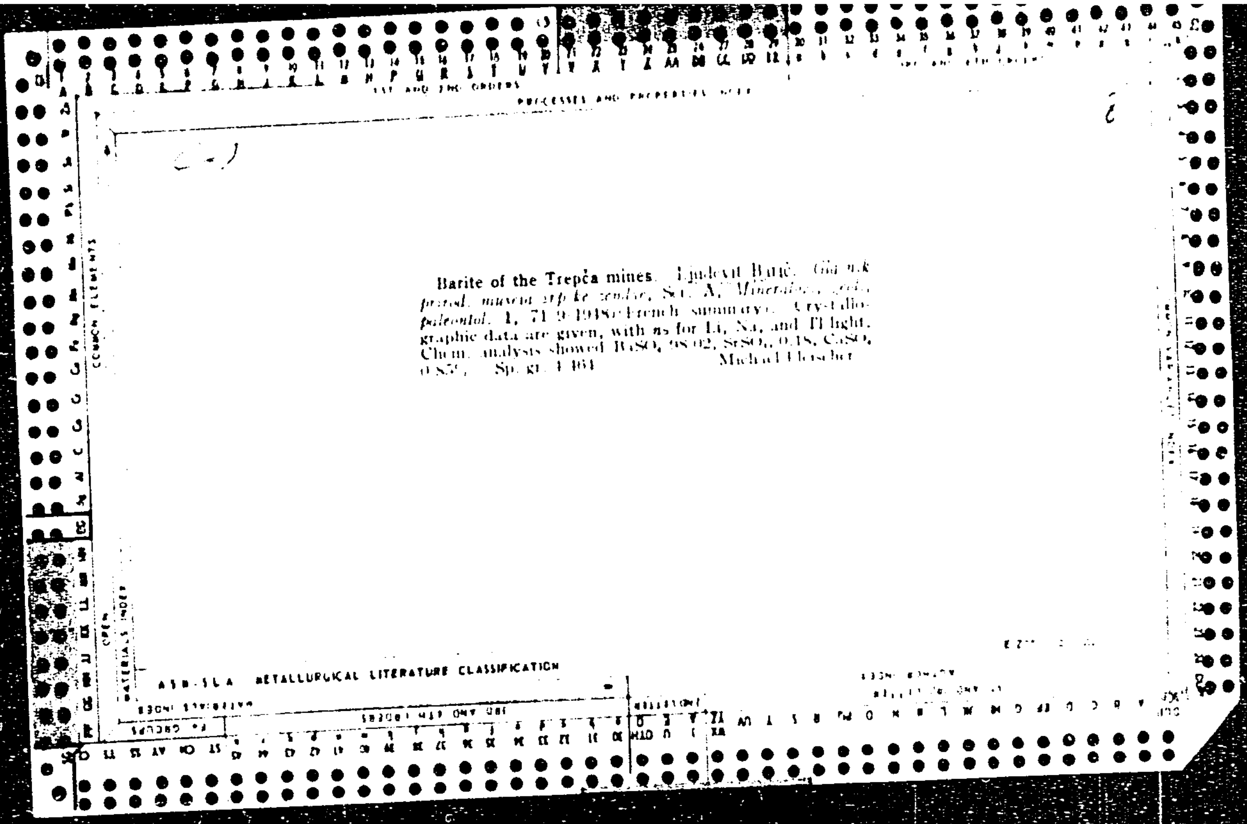
1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

8

Wulfenite from Kravarica-Tal Serbia. Ljudevit Barić. *Vesnik Geol. Inst. Jugoslavije* 7, 295-15 (1938); *Mineralog. Abstracts* 7, [illegible]. Minute yellow crystals of wulfenite occur with sulfides in limestone invaded by trachyte at Kravarica, near [illegible] N.E. Serbia. C. A. Silberrad

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX
COMMON ELEMENTS
MATERIALS INDEX
OPEN
A S M - S L A METALLURGICAL LITERATURE CLASSIFICATION

Barite of the Trepča mines. Ljudevit Barić. *Glasnik prirod. muzeja srpske zemlje*, Ser. A, *Mineral., geol., paleontol.* 1, 71-9 (1948) (French summary). Crystallographic data are given, with ns for Li, Na, and Tl light. Chem. analysis showed $BaSO_4$ 98.02, $SrSO_4$ 0.18, $CaSO_4$ 0.85%. Sp. gr. 4.461. Michael Fleischer

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

The form of barite crystals and cavities corresponding to them in quartz of Suplja Stena near Belgrade. Ljudevit Marić. *Ann. géol. péninsule Balkan* 17, 66-72(1949) (French summary). Crystallographic data are given.

The cavities have the form of barite, which was probably dissolved out by carbonate solns. Michael Fleischer

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CH

An example of exact mineral determination by the theodolite microscope method without knowing the index of refraction of the mineral. Ljudevit Baric (Zagreb, Yugoslavia). *Glasnik Prirod. Muzeja Srpske Zemlje* (Bull. muséum hist. nat. pays serbe), Ser. A, **4**, 107-18(1951) (German summary).—By finding properly oriented grains of olivine, 2V could be detd. directly and the compn. obtained graphically.

Michael Fleischer

BARIC, LJUDEVIT

YUGO.

The optical properties of vivianite from the Pasjaca Mountains. Ljudevit Barić. *Geol. Vjesnik* 5-7, 85-8 (1951-53)(Pub. 1954)(German summary).—The data of Vuhjek (*C.A.* 47, 7955d) give $2V_\gamma$ 90°54'; B. measures 79°15'. Michael Fleischer

Bar L.

BARIC L.

YUGO.

Barite from Mazic (Trepca) near Kosovska Mitrovica. Ljudevit Barić. *Geol. Vjesnik* 5-7, 39(1951-53)(Pub. 1954)(German summary).—Crystals with 13 forms are described. The barite had ns α 1.6360, β 1.6374, γ 1.6480.

Michael Fleischer

BARIC, L.

YUGO

✓The petrography of the Lukovska Banja region in Kopaonik. Ljudevit Barić. *Geol. Vjesnik* 5-7, 40-44(1951-53) (Pub[redacted]mary).—Criticism of the work of Protić (*C.A.* 47, 6835a). Michael Fleischer

[illegible]

[illegible] concerning the [illegible]

[illegible]

BARIC, [illegible]

2

YUGO.

Ludlamite from the Stari Trg (Trepča) lead-zinc-ore deposits near Kosovska Mitrovica (Yugoslavia). Ljudevit Barić. *Neues Jahrb. Mineral. Abhandl.* 86, 179-210 (1954).—Morphological and detailed optical data are given, with a chem. analysis. The occurrence is taken for a late hydrothermal formation. K. H. Wedepohl

Barić, Ljudevit

Pyrophyllite schist from Parsovići, Herzegovina. Ljudevit Barić and Miroslav Tajder (Univ. Zagreb, Yugoslavia). Geol. Vjesnik 8-9, 187-90 (1954-55) (Publ. 1956) (German summary).—The rock consists of quartz, pyrophyllite, and muscovite with a little carbonate. A chem. analysis is given.

Michael Fleischer

2

BARIC, Ljudevit, dr; TAJDER, Miroslav, dr

Pyrophyllitic slate of Parsovici, Hercegovina. Geol vjes Hrv
8/9:187-190 '54/'55 [publ. '56]

1. Clanovi Urednickog odbora, referenti, "Geoloski vjesnik".

BARIC, LJ.

Basic elements of covellins, dimorphisms, and trimorphisms of the [illegible] substance. p. 123.

GEOLOSKI VJESNIK. (Zavod za geoloska istrazivanja Hrvatske i Hrvatsko geolosko drustvo) Zagreb, Yugoslavia. Vol. 11, 1957 (published 1958)

Monthly list of East European Accessions (EEAI) LC, Vol. 8, no. 8, Aug. 1959

Uncl.

BARIC, LJ.

Content of alkali in disthene, with particular reference to the new data published by Henriques. In German. p. 265.

GEOLOSKI VJESNIK. (Zavod za geoloska istrazivanja Hrvatske i Hrvatsko geolosko drustvo) Zagreb, Yugoslavia. Vol. 11, 1957 (published 1958)

Monthly list of East European Accessions (EEAI) LC, Vol. 8, no. 8, Aug. 1959

Uncl.

BARIC, Ljudevit

Piedmontite, gahnite and rutile from the deposit of lead-zinc ores near the village of Nezilovo in Macedonia. Glas Prir muz no.13: 199-204 '60.

(Yugoslavia—Piedmontite) (Yugoslavia—Gahnite)
(Yugoslavia--Rutile)

BARIC, Lj.; IVANOV, T.G.

Mineral association in the neighborhood of the village of Nezilovo on Jakupica Mountain in Macedonia. Bul sc Jug 5 no.2:40 Mr '60.
(EEAI 9:8)

1. Mineralogisch-petrographisches Museum in Zagreb und Anstalt fur geologische Untersuchungen der Volksrepublik Mazedonien, Skopje.
(Macedonia--Minerals)

BARIC, Lj.

Optical characteristics of the diaspore of Sivec, near Prilep, in Macedonia. Bul sc Jug 5 no.3:71 Jl '60. (EEAI 10:5)

1. Mineralogisch-petrographisches Museum der Universitat in Zagreb.
(Macedonia--Diaspore)

BARIC, Lj.

Double breaking of diaspores and disthens. Bul sc Jug 6 no.1:4-6
Mr '61. (EEAI 10:9/10)

1. Mineralogisch-petrographisches Museum der Universitat in Zagreb.

(Mineralogy) (Diaspore)

BARIC, Ljudevit

Polarization densitometers after Martens-Goldberg, respectively Martens-Bechstein. Kem ind 10 no.11:423-433 N '61.

BARIC, Ljudevit

Interdependence between the appearance of barite and the proportion of lead in zinc in the lead-and-zinc deposits of Stari Trg (Trepca), Dobrevo (Zletovo), Sasa and Srebrenica, as well as in some other deposits in Yugoslavia. Geol glas BiH no.6:5-12 '62.

BARIC, Ljudevit

Celestite from the Abu Anz, Quessir District, Egypt. Geol glas BiH no.6: 65-68 '62.

BARIC, Lj.

"Ludlamite from the Stari Trg Mine, Trepca, near Kosovska Mitrovica" by [Mineral.-petrogr. muzej, Zagreb] Lj. Baric. Reviewed by Lj. Baric. Bul sc Youg 7 no.3:79 Je '62.

1. Rédacteur d'extraits, "Bulletin scientifique".

BARIC, Lj.

"Chabazite and desmine of Bor, East Serbia" by [Mineral.-petrogr. inst., Tehnol. fak., Sveucil. Zagreb] V.Majer. Reviewed by Lj. Baric. Bul sc Youg 7 no.3:79 Je '62.

BARIC, Lj.

"General characteristics of melaphyre in the environs of Vares in Bosnia" by [Mineral.-petrogr. inst., Rudarsko-geol. fak., Univ. Beograd] S.Karamata. Reviewed by Lj. Baric. Bul sc Youg 7 no.3: 80 Je '62.

BARIC, Lj.

"Barite of the Dobrevo Mine near Zletovo" by [Mineral.-petrogr. inst., Tehnol. fak., Sveucil. Zagreb] I.Jurkovic. Reviewed by Lj. Baric. Bul sc youg 7 no.3:80 Je '62.

BARIC, Lj.

"Petrographic investigations on the Tertiary sedimentary rocks in the environs of Petrovac (Montenegro)" by M. Dimitrijevic and V. Vucetic. Reviewed by Lj. Baric. Bul sc Youg 7 no.1/2:25 F-Ap '62.

1. Rédacteur d'extraits, "Bulletin scientifique."

BARIC, Lj.

Regular deformation of the diaspore and corundum of Sivec near Prilep, Macedonia. Bul sc Youg 7 no.4/5:99 Ag-O '62.

1. Mineralosko-petrografski muzej, Zagreb.

BARIC, Lj.

"Petrography" by M. Ilic, S. Karamata, V. Knezevic, M. Tajder, Lj. Golub, M. Vragovic, V. Majer, F. Tucan, Lj. Baric. Reviewed by Lj. Baric. Bul sc Youg 7 no.4/5:128-129 Ag-O '62.

BARIC, Lj.

Gypsum and albite in the Ljubija iron-ore deposits, northwest Bosnia. Bul sc Youg 9 no.1/2:8-9 F-Ap '64.

1. Mineralogic and Petrographic Museum, Zagreb.

BARIC, Lj.

Oriented coalescence of vivianites and ludlamites from the Trepca Mines. Bul sc Youg 6 no.2:36 Je '61.

1. Mineralosko-petrografski muzej Sveucilista, Zagreb.

(Yugoslavia--Vivianites)
(Yugoslavia--Ludlamite)

VODOPIJA, Ivan, dr.; BARIC, Ljubo, dr.; SUBAJKOVIC, Mirajana, dr.; TOMPAK, Biserka, dr.; ALERAJ, Dora, dr.; KOSUTIC, Zvonimir, dr.; BREITENFELD, Vladimir, dr.

Salmonellosis java epidemia in a Zagreb hospital. Lijecn. vjesn. 84 no.4:331-338 '62.

1. Iz Zavoda za zastitu zdravlja grada Zagreba, Internog odjela Opce bolnice "Dra M. Stojanovica", Zavoda za zastitu zdravlja NR Hrvatske i Bolnice za zarazne bolesti u Zagrebu.

(SALMONELLA INFECTIONS epidemiol)

BARIC, Ljubo, dr

Pulseless disease. Lijecn. vjesn. 83 no.7:695-704 '61.

1. Iz Internog odjela Opce bolnice "Dra M.Stojanovica" u Zagrebu.
(AORTA dis)

BARIC, S.

The construction of the body and the exterior of Kucovlaska sheep

Poljoprivredna Znanstvena Smatra 13:101-119

BARICA, Jan, inz.

New sources of water pollution and their effect on water purity in the middle section of the Hron River. Vodohosp cas 10 no.1:82-94 '62.

1. Vyskumny ustav vodohospodarsky, Bratislava.

BARICA, Jan, inz.

Water quality in the Vihorlat Reservoir. Vodni hosp 13 no.4: 140-143 '63.

1. Vyskumny ustav vodohospodarsky, Bratislava.

BUNTOVA, Ema; BARICA, Stefan

Study of vitamin B12 formation under different cultivation conditions of Propionibacterium shermanii i Propionibacterium freudenreichii. Biologia (Bratisl.)19 no.5:366-372 '64

1. Ustredny vyskumny ustav potravinarskeho priemyslu v Bratislave.

TIBENSKA, Marta; LISHAKOVA, Erna; BUNTOVA, Ema; BARICA, Stefan

Metabolism of amino acids during the formation of vitamin B12 by a strain of Actinomyces olivaceous. Biologia 18 no.12: 928-936 '63.

1. Zentrales Forschunginstitut fur die Nahrungsmittelindustrie, Zweigstelle in Bratislava.

BARICEVIC, Franjka

Contribution of the Jugomontaza Enterprise of Zagreb to the advance of welding technology. Zavarivanje 6 no.1:20-22 Ja '63.

PETROV, K.A., NEYMYSHEVA, A.A., DOTSEV, G.V., BARICH, A.G.

"Reactions of sulfene chlorides and N-chloromines with phosphorus trichloride , di
dichlorophosphines, and red phosphorus."

[illegible]

[illegible] of [illegible]

YUGOSLAVIA / Human and Animal Physiology. Thermoregulation.

Abs Jour: Ref Zhur-Biol., No 21, [illegible] 3020.

Author : Barach [illegible]
Inst :
Title : The Nervous-Chemical Regulation of [illegible]

Orig Pub: Arkhiv biol. nauk, [illegible] 5, No 3-4 [illegible]

Abstract: No abstract.

Card : 1/1

BARICH. L. [Baric, L.]

Regular integrowth of vivianite and ludlamite from the Stari TRG (Trepča) lead-zinc deposit. Twins of ludlamite. Min. sbor. no.16:391-395 '62. (MIRA 16:10)

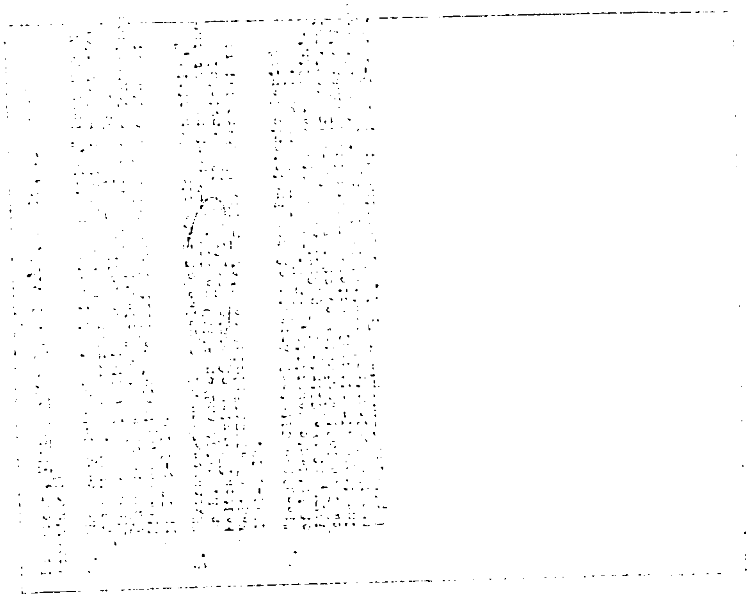
1. Mineralogo-petrograficheskiy muzey universiteta, Zagreb, Yugoslaviya.

(Trepca—Vivianite) (Trepca—Ludlamite)
(Crystals—Growth)

KHARLAMOV, N., polkovnik; BARICHEV, I., inzhener-podpolkovnik

Don't record, but prevent. Tekh. i vooruzh. no.1:50-52 Ja '64.
(MIRA 17:6)

BARICZ, A.



S/133/63/000/004/008/011
A054/A126

AUTHORS: Pakuleva, V. S., Khuden'kikh, A. A., Barikhin, A. S.

TITLE: Adaptation and improvement of heat treatment of ДИ-1 (DI-1) grade steel

PERIODICAL: Stal', no. 4, 1963, 358 - 360

TEXT: The DI-1 (20Х15Н3МА/20Kh15N3MA) grade having a HB of 3.2 mm after standard heat treatment, displayed cracks upon polishing with abrasives. To eliminate this the metal (180 mm square and 170 mm circular sections) was investigated with a dilatometer and a laboratory electric furnace, to establish the optimum annealing temperature and holding time, so that the required hardness was ensured. It was found that the cracks were mainly caused by inadequate cooling of the specimens prior to being placed in the soaking pits and by the high annealing temperature. The necessary hardness (about 3.5 mm) was obtained with a metal temperature not higher than 100°C. Optimum annealing took place at 650°C. To establish the best cooling method, tests were carried out on the effect of the forging end temperature and cooling rate on austenite transformation.

Card 1/2

Adaptation and improvement of heat treatment of... S/133/63/000/004/008/011
A054/A126

The best results were obtained when 450 x 450 mm ingots were cooled in non-heated pits for not less than 72 hours to 50°C, thereupon they were processed with abrasives and put into a pusher type furnace for heating to forging temperature. This must take place not later than 5 days after removal from the pits. The 405-mm diameter circular sections must be air-cooled for a minimum of 24 and a maximum of 72 hours. They should be annealed at 650±10°C with a holding time of 20 hours + 0.9 hour/t of the charge. Next they must be furnace cooled to 200°C at a 30 - 50°C/h rate, followed by air-cooling. 150 - 170 mm square and circular sections should be aircooled for 24-72 hours to maximum 50°C. To ensure a forging end temperature of 950°C, the ingots must be heated to 1,130°C instead of 1,180°C prior to forging. The new heat treatment eliminated the crack formation both in the ingots and the forged sections. There is 1 figure.

ASSOCIATION: Chelyabinskiy metallurgicheskiy zavod (Chelyabinsk Metallurgical Plant)

Card 2/2

BARIKIN, A. Eng.

"Towards Automation in the Medical Industry," Med. Rab., 4 Dec 55

BARIKOV, Abdulkalat Abdullatypovich; PRONINA, Anna Moiseyevna;
RYABUKHIN, G.Ye., red.; KALOSHINA, T.V., red. izd-va;
GUROVA, O.A., tekhn. red.

[Oil- and gas-bearing provinces in southeastern Asia and the Near East; geological conditions governing regional oil and gas accumulation]Neftegazonosnye oblasti Blizhnego Vostoka i IUgo-Vostochnoi Azii; geologicheskie usloviia regional'nogo neftegazonakopleniia. Moskva, Gosgeoltekhizdat, 1962. 207 p. (MIRA 15:9)

(Asia, Southeastern--Petroleum geology)
(Asia, Southeastern--Gas, Natural--Geology)
(Near East--Petroleum geology)
(Near East--Gas, Natural--Geology)

DZHUSUPBEKOV, S.D., red.; SNEGIN, D.F., red.; BARIKOV, G.A., red.;
GORYACHEVA, A.A., red.; RUSAKOV, I.V., red.; BORSUK, F.,
red.; TURABAYEV, B., tekhn.red.

[Alma-Ata, capital of the Kazakh S.S.R.] Alma-Ata - stolitsa
Kazakhskoi SSR. Alma-Ata, Kazakhskoe gos.izd-vo, 1960. 304 p.
(MIRA 14:3)

(Alma-Ata)

N/5
613.326
.B 1

Barikov, Oleg Ivanovich

Ul'trazvuk i yego primeneniye v promyshlennosti [Ultrasonics and its use in industry] Moskva, Fizmatgiz, 1958.

260 p. illus., charts, diagrs., graphs, tables.
(Fiziko-Matematicheskaya Biblioteka Inzhenera)

"Literatura": p. 249-256.

PARIEV, V.G.; BONGINA, O.A.

Determination of the microquantities of [illegible] by the method of deposition on and removal from a graphite [illegible]. Zav. lab. 30 no.10:1184-1187 '64. (MIRA 18:4)

1. Kazakhskiy gosudarstvennyy universitet [illegible].

BARIKOV, V.G.; SONGINA, O.A.

Graphite electrode in electrochemical me[illegible] [illegible]
Zav. lab. 30 no.1:5-8 '64. [illegible]

S/032/63/029/001/006/022
B101/B186

AUTHORS: Rozhdestvenskaya, Z. B., Songina, O. A., and Barikov, V. G.

TITLE: Amperometric determination of uranium by a graphite electrode

PERIODICAL: Zavodskaya laboratoriya, v. 29, no. 1, 1963, 30 - 33

TEXT: The amperometric titration with Trilon B is described for solutions containing 10^{-3} - 10^{-8} g uranium. Using a platinum electrode the current was very unstable, probably in consequence of oxidation and complex formation, so a graphite rod as usually employed in spectrum analyses was adopted as electrode. This gave stable amperages at low concentrations. The potential of graphite was +0.2 v as measured against a mercury iodide reference electrode. U(VI) was reduced with formamidine sulfonic acid to U(IV). The solution heated by the reduction process had to be cooled to room temperature since temperature variations affected the result. $Hg(NO_3)_2$ served as indicator. The pH of the solution to be titrated should be 1.5 - 2. At very low concentrations the end point of titration becomes indistinct through blurring of the titration curve, but it can be

Card 1/2

Amperometric determination of ...

S/032/63/029/001/006/022
B101/B186

determined graphically. The method is recommended for determining U in soils and waters. There are 4 figures and 1 table.

ASSOCIATION: Kazakhskiy gosudarstvennyy universitet im. S. M. Kirova (Kazakh State University imeni S. M. Kirov)

Card 2/2

KOMAROVA, L.I.; MOVSESYAN, G.P.; BARIKYAN, Kh.G.

Mixing as a factor accelerating biochemical processes in wine making. Izv. AN Arm. SSR. Biol. nauki 17 no.6:15-22 Je '64. (MIRA 17:12)

1. Armyanskiy institut vinodeliya, vinogradarstva i plodovodstva.

BARILA, Kazimir, Pukovnik dr.

The possibility of use of EDTA (ethylenediamine tetraacetic acid) in clinical practice and in the treatment of poisoning with heavy metals. Voj. san. pregl., Beogr. 12 no.7-8:414-418 July-Aug 55.

1. Interna klinika, VMA.
(ACETIC ACID, deriv.
edathamil calcium, ther. of pois. with heavy metals (Ser))
(POISONING,
heavy metals, ther., edathamil calcium (Ser))
(METALS, pois.
heavy metal pois., ther., edathamil calcium (Ser))

[illegible]TIA, I.

Gases affecting the nervous system. p. 2. SIVILNA ZASTITA. (Ministarstvo unutrasnjih poslova. Upra[illegible] [illegible] zastite) Beograd. Vol. 3, no. 1, Jan./Feb. 1956.

SOURCE: East European Accessions List, (EEAL), Library of Congress, Vol. 5, no. 12, December 1956

BARIL'CHENKO, S.P.

BARIL'CHENKO, S.P. [Baryl'chenko, S.P.]

New planters for collective farms. Mekh. sil'. hosp. 9 no.1:14 Ja '58. (MIRA 11:2)

1. Golovniy inzhener kirovograds'kogo zavodu "Chervona Zirka."
(Planters (Agricultural machine)

BARIL'CHENKO, S.P. [Baryl'chenko, S.P.]

New SSN-18 sugarbeet planter. Mekh.sil'.hosp. 10 no.1:28-29 Ja '59. (MIRA 12:4)

1. Glavnyy inzhener Kirovogradskogo zavoda "Chervona zirka."
(Planters (Agricultural machinery))

BABIL'CHENKO, S.

Good seeds produce good sprouts. NTO 2 no.8:47 Ag '60.
(MIRA 13:10)

1. Glavnyy inzhener zavoda "Krasnaya zvezda," predsedatel' oblastnogo pravleniya Nauchno-tekhnicheskogo obshchestva mashinostroitel'noy promyshlennosti, g.Kirovograd.
(Kirovograd—Technical education)

BARILENKO A.V.

AUTHOR: Barilenko, A. ___ Engineer. 110-12-15/19

TITLE: The Use of Gamma-defectoscopy in Machine Construction.
(Primeneniye gamma-defektoskopii v mashinostroyenii)

PERIODICAL: Vestnik Elektropromyshlennosti, 1957, vol.28, no.12,
pp. 55 - 58 (USSR)

ABSTRACT: In this general review, gamma-defectoscopy is claimed to have advantages over methods such as magnetic, ultrasonic and roentgen radiography.
The main advantage is great penetrating power, so that products up to 250 mm thick can be examined. The source is portable and the apparatus simple. The sanitary rules of the Ministry of Health of the USSR issued in 1955 stipulate that the daily dose should not exceed 0.05 roentgen. The method of production of radio-active sources is briefly described. The first isotope used in the USSR was Co^{60}, but Ir^{192} is now also employed, but has a short service life because of the short half-life. Investigations are also being made with Tu^{170}. In addition, Se^{75}, Cs^{134}, Cs^{137}, Eu^{152}-Eu^{154}, Ta^{182} and other isotopes find some use.
The general technique of gamma-defectoscopy is described, with examples. The relationship between the dimensions of a defect and the thickness of the irradiated steel object is graphed in

Card1/2

. The Use of Gamma-[illegible] Machine Construction 110-12-15/19

Fig.1. Radiograph [illegible] S[illegible] by fall [illegible]
The equipment [illegible] contained
main groups [illegible] corresponding to 0.7 g equiv-
in them. The first [illegible] illustrated in Fig.3 and
alent Co^{60}; [illegible] sources, up to 100 g
Fig.4. Install[illegible] weighing 800 kg and
equivalents, are [illegible] effective screening. One
more because of [illegible] and briefly described.
such apparatus [illegible]
There are 5 figures [illegible] references, all of which are Slavic.

ASSOCIATION. T[illegible]

SUBMITTED. June [illegible]

AVAILABLE: Library [illegible]

Card 2/2

BARILENKO, L.M.[translator]; FRIDMAN, V.Ya.[translator]; TSYPKIN, Ya.Z., doktor tekhn. nauk, red.; MIKHALEVSKIY, B.N., kand. ekon. nauk, red.; YAKIMENKO, L.P., red.; FRIDANTSEVA, S.V., tekhn. red.

[Control processes in the models of economic systems] Protsessy regulirovaniia v modeliakh ekonomicheskikh sistem; sbornik statei. Moskva, Izd-vo inostr. lit-ry, 1961. 292 p. (MIRA 15:3)
Translated articles.
(Economics, Mathematical) (Economics--Electromechanical analogies)
(Economics--Electronic data processing)

BARILENKO V. I.

~~KASPAROV, YA.~~ B.

5(4) PHASE I BOOK EXPLOITATION SOV/2216

Soveshchaniye po elektrokhimii. 4th, Moscow, 1956.

Trudy...; [sbornik] (Transactions of the Fourth Conference on Elect-
rochemistry; Collection of Articles) Moscow, Izd-vo AN SSSR,
1959. 868 p. Errata slip inserted. 2,500 copies printed.
Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh
nauk.

Editorial Board: A.N. Frumkin (Resp. Ed.) Academician, O.A. Yesin,
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and G.M. Florianovich; Ed. of Publishing House: N.G. Yegorov;
Tech. Ed.: T.A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

COVERAGE: The book contains 127 of the 138 reports presented at
the Fourth Conference on Electrochemistry sponsored by the Depart-
ment of Chemical Sciences and the Institute of Physical Chemistry,
Academy of Sciences, USSR. The collection pertains to different
branches of electrochemical kinetics, double layer theories and
galvanic processes in metal electrodepositon and industrial elect-
rolysis. Abridged discussions are given at the end of each divi-
sion. The majority of reports not included here have been
published in periodical literature. No personalities are mentioned.
References are given at the end of most of the articles.

Zaretskiy, S.A., I.G. Zharnitskiy (Deceased), and I.A. Bogdanova.
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Razina, N.F. (Dnepropetrovskiy khimiko-tekhnologicheskiy institut
imeni F.E. Dzerzhinskogo; Institut khimii AN KazSSR - Dnepro-
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zhinskiy; Institute of Chemistry, Academy of Sciences, Kaz-
SSR). Electrode Processes at a Lead Anode and Its Corrosion
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Sources of Current 737

Kasparov, Ya. B., E. G. Yampol'skaya, and B. N. Kabanov.
Role of Barium Sulfate in the Negative Plate of a Lead
Battery 744

Koval', I.I., and V. I. Barilenko. Mechanism of the Loss
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Electrode of a Lead Battery 748

Krivolapova, Ye. V., E. S. Vaysberg, and B. N. Kabanov.
Investigating a Lead Dioxide Electrode for Potential Drop
and Oxygen Evolution 757

Kryukova, T.A. (Vsesoyuznyy nauchno-issledovatel'skiy
institut istochnikov toka-All-Union Scientific Research
Institute of Electric Power Sources). Growth of Zinc
Dendrites in Some Swelling Polymers 762

Flerov, V. N. (Gor'kovskiy politekhnicheskiy institut imeni

Card 30/34

PARILENKO, V. I.

5(4) PHASE I BOOK EXPLOITATION SOV/2216

Soveshchaniye po elektrokhimii. 4th, Moscow, 1956.

Trudy...; [sbornik] (Transactions of the Fourth Conference on Electrochemistry; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 868 p. Errata slip inserted. 2,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk.

Editorial Board: A.N. Frumkin (Resp. Ed.) Academician, O.A. Yesin, Professor; S.I. Zhdanov (Resp. Secretary), B.N. Kabanov, Professor, S.I. Zhdanov (Resp. Secretary); B.N. Kabanov, Professor, Ya. M. Kolotyrkin, Doctor of Chemical Sciences; V.V. Losev, P.D. Lukovtsev, Professor; Z.A. Solov'yeva; V.V. Stender, Professor; and G.M. Florianovich; Ed. of Publishing House: N.G. Yegorov; Tech. Ed.: T.A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

COVERAGE: The book contains 127 of the 138 reports presented at the Fourth Conference on Electrochemistry sponsored by the Department of Chemical Sciences and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemical kinetics, double layer theories and galvanic processes in metal electrodepositon and industrial electrolysis. Abridged discussions are given at the end of each division. The majority of reports not included here have been published in periodical literature. No personalities are mentioned. References are given at the end of most of the articles.

A.A. Zhdanova-Gor'kiy Polytechnic Institute imeni A.A. Zhdanov). Influence of Aging Processes on the Work of Alkaline-Zinc Elements 768

Lukovtsev, P.D. Theory of Processes Occurring at Oxide Electrodes of Chemical Sources of Current 773

Rozentsveyg, S.A., and V.I. Levina. Mechanism of the Activation of an Iron Electrode with Small Additions of Nickel Oxides 781

Balashova, N.A., V.A. Ivanov, and L.D. Kovba (Institute of Electrochemistry, Academy of Sciences, USSR). Using Tagged Atoms to Study Processes in Chemical Sources of Current 788

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Card 31/34

SOV/110-59-4-17/23

AUTHORS: Koval' I.I. (Candidate of Technical Sciences) and
Barilenko V.I. (Engineer)

TITLE: Increasing the Service Life of Lead-Acid Accumulators
(Ob uvelichenii sroka sluzhby svintsovykh akkumulyatorov)

PERIODICAL: Vestnik Elektropromyshlennosti, 1959, Nr 4, pp 60-64 (USSR)

ABSTRACT: The service life of modern accumulators is usually governed by the life of the positive plates. If the service is such that the accumulator is deeply discharged the active mass usually fails. If discharge is not deep and is usually followed by overcharging the grid fails first. Systematic operation at high electrolyte temperatures causes accelerated corrosion of the positive plate grids. This article considers only improvement of the life of the active mass. In service the active mass of positive plates is gradually softened and falls off, and this can be prevented to some extent by the use of glass-felt separators, though these have certain disadvantages. The authors concluded that most of the difficulties result from the formation during discharge of coarse crystals of lead sulphate, promoted by low acid concentration. In recent years Soviet electro-chemists (B.N.Kabanov, A.K.Lorents, E.I.Krepakova, Ya.B.Kasparov,

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SOV/110-59-4-17/23

Increasing the Service Life of Lead-Acid Accumulators

E.V.Krivolapova and others) have established that the presence of even small quantities of barium sulphate in the active mass of the positive plates promotes softening, particularly when the accumulator is deeply discharged. As barium sulphate is used in the paste for the negative plates, it might sometimes get into the paste for the positive plates. The authors studied the effect of adding barium sulphate so as to understand better the mechanism of softening of the active mass on positive plates. The work suggested that one method of increasing the life of the active mass is chemically to reduce the dioxide with the formation of large crystals of lead sulphate. During the next charging period, the large crystals of sulphate are converted to lead dioxide of strong structure. Reducing agents were introduced into accumulators of 7 ampere hours nominal rating after 90 operating cycles with the accumulators in both charged and discharged conditions. In all cases the use of reducing agents increased the life of the accumulators. The most effective reducing agent was hydroxyalamine. Accumulators were tested in which the positive plates were treated with

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SOV/110-59-4-17/23

Increasing the Service Life of Lead-Acid Accumulators

solutions of hydroxyalamine in sulphuric acid before assembly in the charged condition and other accumulators were made up, and charged and discharged before treatment with reducing agent. The results of life tests on treated accumulators are given in Table 1, from which it will be seen that a 1% solution of reducing agent considerably increases the life. If the concentration is greater than 1% the accumulator capacity is greater at first but the life is short because the grids are corroded more rapidly. Tests were also made on the use of reducing agents of different concentrations on plates operating in excess sulphuric acid, and the test results are given in Table 2. The main conclusion is that the reducing agent works very rapidly. To determine the degree of reduction of lead dioxide the active mass was analysed after treatment with different concentrations of hydroxyalamine in sulphuric acid and the results are given in Table 3. If the concentration of reducing agent is too high the degree of reduction is less, apparently because the surface pores become blocked and it is more difficult for the reducing agent to diffuse into the

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SOV/110-59-4-17/23

Increasing the Service Life of Lead-Acid Accumulators

inner layers of the active mass. The formation of large crystals of lead sulphate as a result of using reducing agent will be seen from the microphotographs given in Fig 1. The next tests were made with hydroxyalamine in concentrations of 0.5 and 2.5% using medium sized accumulators. Life tests were made on the accumulators and hydroxyalamine was introduced into the discharged accumulators after 25, 50 and 100 operating cycles. The normal acid solution was replaced by acid solution containing reducing agent. Graphs of accumulator capacity against service life are given in Figs 2 and 3 from which it will be seen that in all cases the use of reducing agents increased the life of the accumulators and the long period capacity of the accumulators was increased, though sometimes the short term capacity was reduced. The use of reducing agent after 50 or 100 cycles either did not alter the capacity or reduced it somewhat. Tests were made to confirm that where capacity increase occurred it was not as a result of the corrosion of the grids. For this purpose, platinum grids were used for the tests, the results of which are given in Fig 4, in which the increase

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Increasing the Service Life of Lead-Acid Accumulators

in capacity after inclusion of hydroxyalamine is evident. The results of another test using a platinum grid are given in Fig 5, and here too hydroxyalamine has increased the capacity. It is concluded that using the optimum hydroxyalamine concentration of 0.5 - 1% weight, the increase in the life of positive plates of lead accumulators is up to 30%. The capacity of the positive plates is increased by the use of reducing agents and this is not a result of corrosion of the grid. It is recommended to add hydroxyalamine into the electrolyte after the accumulator has operated for 70 - 100% of the guaranteed working life. Hydroxyalamine can be introduced into the accumulator to increase the capacity after about 25% of the guaranteed working life. There are 5 figures and 3 tables.

Card 5/5

S/110/60/000/002/002/005
E021/E455

AUTHORS: Koval', I.I., Candidate of Technical Sciences and Barilenko, V.I., Engineer

TITLE: Possible Ways of Improving the Service Life of Lead Accumulators

PERIODICAL: Vestnik elektropromyshlennosti, 1960, No.2, pp.43-46

TEXT: The effects on the positive plates of additions of sodium thiosulphate, methylene blue and hydrogen peroxide have each been studied. Plates 98 x 64 x 1.8 mm were pasted with production paste and tested in excess electrolyte. 1, 5 and 10% additions (by weight of 1.285 acid) of sodium thiosulphate were added to the charged cells after the tenth charge and 1 and 5% additions after the tenth discharge. The 1, 5 and 10% additions decreased the capacity by 7, 30 and 50% respectively on the subsequent discharge. In all cases, however, the service life of the plates was extended. For instance, the 5% additions gave a 70% increase against a standard. 1 and 5% additions of sodium thiosulphate were also

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S/110/60/000/002/002/005
E021/E455

Possible Ways of Improving the Service Life of Lead Accumulators

made to CT-140 (ST-140) accumulators. The capacity and the service life were somewhat increased over long discharges. With short discharge durations, however, the 5% additions caused a decrease in capacity. Similar tests with additions of methylene blue showed that a 1% addition to the charged cell lowered the capacity of the positive plate on the first discharge, but thereafter the capacity returned to normal. There was a 30% increase in life. Tests with ST-140 accumulators showed that a 1% addition of methylene blue after 100 cycles increased the capacity on both long and short discharge durations. It was shown that, in common with the other reducing agents, hydrogen peroxide caused a loss of capacity. Yet it did not increase the service life of positive plates. Thus, it was thought that changes in the size and shape of the lead sulphate formed might be responsible for the increase in life. This was checked by growing crystals of lead sulphate from lead nitrate. In the presence of sodium thiosulphate and methylene blue, coarse

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E021/E455

Possible Ways of Improving the Service Life of Lead Accumulators

crystals of lead sulphate in a dendritic form were observed. Hydrogen peroxide caused no changes in the size and shape of the lead sulphate. There are 5 figures.

Card 3/3

BARILENKO, V. P.

AID P - 1500

Subject : USSR/Medicine

Card 1/1 Pub. 37 - 15/19

Author : Barilenko, V. P., Assistant Prof.

Title : Enlarged Assembly of the Presidium of the Academy of Medical Sciences, USSR, in Dnepropetrovsk

Periodical : Gig. i san., 2, 54-56, F 1955

Abstract : A summary of the reports communicated at the joint meeting of the Academy with the Scientific Council of the Dnepropetrovsk Medical Institute and regional public health workers, June 28 - July 1, 1954. Labor conditions, traumatism, and prevention of silicosis were discussed.

Institution: None

Submitted : No date

BARILENKO, V.P.; SUFIK, B.I.

Result of cooperation of a medical institute and a statistical board. Sov.zdrav. 16 no.5:12-17 My '57. (MLRA 10:7)

1. Iz kafedry organizatsii zdravookhraneniya (zav. - prof. B.M. Shklyar) Dnepropetrovskogo meditsinskogo instituta (dir. - dotsent D.P.Chukhriyenko) i Statisticheskogo upravleniya Dnepropetrovskoy oblasti (nachal'nik V.F.Prikhod'ko).

(VITAL STATISTICS,
cooperation of med. institutes with statist. boards in Russia (Rus))

MUSERSKIY, N.N.,professor; BARILENKO, V.P.

Problems to be solved. Gig. i san. 21 no.1:45-47 Ja. '56 (MLRA 9:5)

1. Iz Dnepropetrovskogo meditsinskogo instituta.
(HYGIENE, educ.
in Russia, progr.)
(SANITATION, educ.
same)

BARILENKO, V.P., assistent; BORISOV, K.A., promyshlennyy sanitarnyy vrach

Control of compliance with health regulations in designing agricultural machinery. Gig. i san. 22 no.7:83-84 Jl '57. (MIRA 10:10)

1. Iz Denpropetrovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii i Denpropetrovskogo meditsinskogo instituta.
(AGRICULTURE,
safety rules in machine shops (Rus))

YEMEL'YANOVA, G.F., BARILENKO, V.P.

Revisions are necessary in the curriculum. Sov.zdrav. 17 no.8:3033
Ag '58 (MIRA 11:8)

1. Iz kafedry organizatsii zdravookhraneniya (zav. G.F. Yemel'yanova)
Dneporpetrovskogo meditsinskogo instituta (dir. - prof. D.P. Chukhriyenko).
(PUBLIC HEALTH, educ
in Russia, need for curriculum changes (Rus))

YEMEL'YANOVA, G.F., BARILENKO, V.P.

"Sanitation, therapy, and prophylaxis provided for workers at machine-tractor stations." by R.D. Gabovich. Reviewed by G.F. Emel'ianova, V.P. Barilenko. Gig. i san. 23 no.8:87-88 Ag '58 (MIRA 11:9)

(MACHINE-TRACTOR STATIONS--HYGIENIC ASPECTS)
(MEDICINE, RURAL)

BARILENKO, V.P.

Methods of improving medical and sanitary services for agricultural machinery operators. Vrach.delo no.8:855-857 Ag '59. (MIRA 12:12)

1. Kafedra organizatsii zdravookhraneniya (zav. kafedroy - G.F. Yemel'yanova) Dnepropetrovskogo meditsinskogo insituta.
(DNEPROPETROVSK PROVINCE--AGRICULTURAL LABORERS--MEDICAL CARE)

BARILENKO, V.P.; YEMEL'YANOVA, G.F.; CHERNENKO, I.N. (Dnepropetrovsk)

Activity of the Red Cross Society in the program of the departments of public health organization. Sov. zdrav. 19 no.7:39-41 '60.
(MIRA 13:8)

1. Iz kafedry organizatsii zdravookhraneniya (zav. G.F. Yemel'yanova) Dnepropetrovskogo meditsinskogo instituta i Dnepropetrovskogo oblastnogo komiteta Obshchestva Krasnogo (predsedatel' I.N. Chernenko).
(PUBLIC HEALTH ADMINISTRATION--STUDY AND TEACHING)

BAKILENKO, V.P.; YEMEL'YANOVA, G.F.

Accident control in agriculture. Vrach. delo no.5:131-132 My '61.
(MIRA 14:9)

1. Kafedra organizatsii zdravookhraneniya (zav. - G.F. Yemel'yanova) Dnepropetrovskogo meditsinskogo instituta.
(AGRICULTURE--ACCIDENTS)

BARILENKO, V.P. (Dnepropetrovsk)

Complex plans for health measures on collective farms. Sov. zdrav. 21 no.3:27-31 '62. (MIRA 15:3)

1. Iz kafedry organizatsii zdravookhraneniya (zav. G.F. Yemel'yanova) Dnepropetrovskogo meditsinskogo instituta (dir. - dotsent N.Ya. Khoroshmanenko).

(COLLECTIVE FARMS)
(PUBLIC HEALTH, RURAL)

Барилко, И.А.

MANEVICH, M.G.; BARILKO, I.A.

Burning crushed anthracite. Sakh. prom. 31 no.5:53-56 My '57.
(MIRA 10:6)

1. Gosudarstvennyy institut po proyektirovaniyu novogo stroitel'stva i rekonstruktsii predpriyatiy sakharnoy promyshlennosti.
(Combustion)

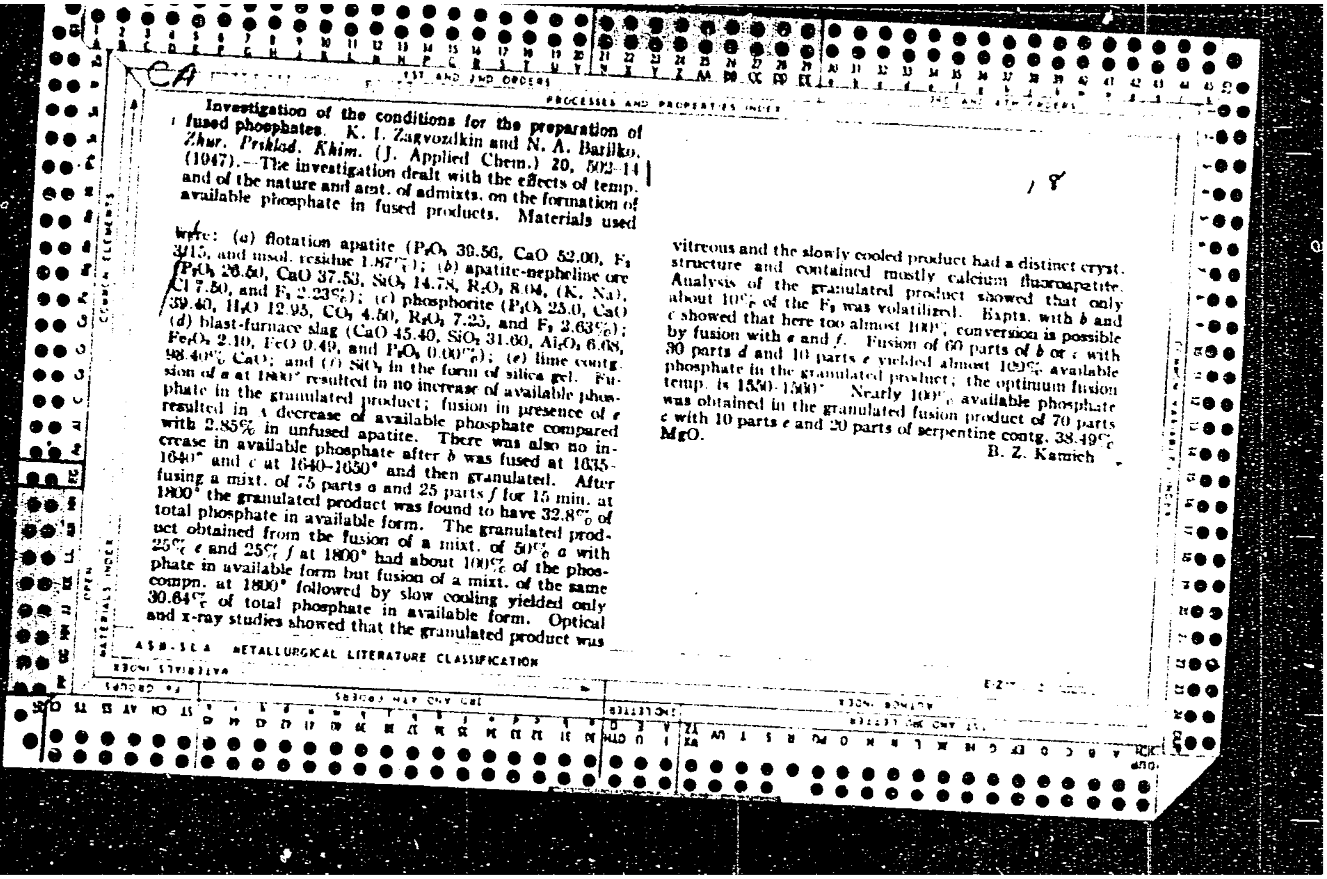
ZAGVOZDKIN, K.; BARILKO, N. A.

Moscow

Thermics Laboratory, Scientific Research Institute of Fertilizers and Insecto-Fungicides (SIC), (-1940-).

"Study of the Conditions of Oxidation of Phosphorous in the Gaseous Phase by Atmospheric Oxygen."

Zhur. Fiz. Khim., Vol. 14, No. 4, 1940.



CA

PROCESSES AND PROPERTIES INDEX

Investigation of the conditions for the preparation of
fused phosphates. K. I. Zagvozdkin and N. A. Barilko.
Zhur. Priklad. Khim. (J. Applied Chem.) 20, 502-14
(1047).—The investigation dealt with the effects of temp.
and of the nature and amt. of admixts. on the formation of
available phosphate in fused products. Materials used

were: (*a*) flotation apatite (P_2O_5 39.56, CaO 52.00, F_2
3.15, and insol. residue 1.87%); (*b*) apatite-nepheline ore
(P_2O_5 26.60, CaO 37.53, SiO_2 14.78, R_2O_3 8.04, (K, Na),
Cl 7.50, and F_2 2.23%); (*c*) phosphorite (P_2O_5 25.0, CaO
39.40, H_2O 12.95, CO_2 4.50, R_2O_3 7.25, and F_2 2.63%);
(*d*) blast-furnace slag (CaO 45.40, SiO_2 31.60, Al_2O_3 6.08,
Fe_2O_3 2.10, FeO 0.49, and P_2O_5 0.00%); (*e*) lime contg.
98.40% CaO; and (*f*) SiO_2 in the form of silica gel. Fu-
sion of *a* at 1800° resulted in no increase of available phos-
phate in the granulated product; fusion in presence of *e*
resulted in a decrease of available phosphate compared
with 2.85% in unfused apatite. There was also no in-
crease in available phosphate after *b* was fused at 1635-
1640° and *c* at 1640-1650° and then granulated. After
fusing a mixt. of 75 parts *a* and 25 parts *f* for 15 min. at
1800° the granulated product was found to have 32.8% of
total phosphate in available form. The granulated prod-
uct obtained from the fusion of a mixt. of 50% *a* with
25% *e* and 25% *f* at 1800° had about 100% of the phos-
phate in available form but fusion of a mixt. of the same
compn. at 1800° followed by slow cooling yielded only
30.64% of total phosphate in available form. Optical
and x-ray studies showed that the granulated product was

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vitreous and the slowly cooled product had a distinct cryst.
structure and contained mostly calcium fluoroapatite.
Analysis of the granulated product showed that only
about 10% of the F_2 was volatilized. Expts. with *b* and
c showed that here too almost 100% conversion is possible
by fusion with *e* and *f*. Fusion of 60 parts of *b* or *c* with
30 parts *d* and 10 parts *e* yielded almost 100% available
phosphate in the granulated product; the optimum fusion
temp. is 1550-1500°. Nearly 100% available phosphate
was obtained in the granulated fusion product of 70 parts
c with 10 parts *e* and 20 parts of serpentine contg. 38.49%
MgO.

B. Z. Kamich

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ACCESSION NR: AR4020781 S/0271/64/000/002/B039/B039

SOURCE: RZh. Avtomat., telemekh. i vy*chislitel. tekhnika, Abs. 2B241

AUTHOR: Barilko, Sh. I.; Vankov, I. D.

TITLE: Ferrite commutator for a magnetic operational memory with plane selection

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern. radio-elektronike. T. 2. Ch. 1. M., Gosatomizdat, 1963, 144-154

TOPIC TAGS: magnetic operational memory, ferrite commutator, plane selection, computer, read-record commutator, read-write commutator

TRANSLATION: The read-write current commutator for a magnetic operational memory, constructed in accordance with the plane selection method (system of coincident currents), feeds a 2-pole current pulse to the buses selected in the address unit. Fundamentally, the commutator requires that the currents be identical on all the buses and stable in time. Commutator circuits are described in which the address buses of the operational memory are connected directly to the read and write pulse-generator circuits, and transistors fulfill only keying functions.

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ACCESSION NR: AR4020781

The address currents are commutated by diode-transformer gates. Many more transistors are required, but the amplitudes of the read and write current pulses become more stable (because of the high output impedence of the generators of these pulses) and they are more uniform on all of the address buses. Data are given comparing various tube circuits as well as the experimental results from testing one of the optimal circuits. During adjustment it was found that reliable commutation is obtained when the voltage pulses on the transistors exceed 10 v. Comparison of these pulses across resistors showed they do not differ by more than 1%. It is assumed that these circuits will provide high reliability because the currents on the address buses are identical and because fewer elements are used. These circuits may be used in multichannel amplitude and time analyzers as well as in computers. Orig. art. has 7 refs. O.M.

DATE ACQ: 03Mar64 SUB CODE: SD, CP ENCL: 00

L 33993-66 EWT(d)/EWP(1) IJP(c) BB/GG

ACC NR: AR6017198 SOURCE CODE: UR/0058/65/000/012/A032/A033

AUTHOR: Anisimov, A. P.; Barilko, Sh. I.; Vankov, I. D.

TITLE: High-speed arithmetic unit for multichannel analyzer

10C

SOURCE: Ref. zh. Fizika, Abs. 12A315

REF SOURCE: Tr. 6-y Nauchno-tekhn. konferentsii po yadern. radioelektron. T. 2. M., Atomizdat, 1965, 58-67

TOPIC TAGS: multichannel analyzer, arithmetic unit, algebraic logic, computer memory, computer program

ABSTRACT: The authors describe the functions performed by an arithmetic unit (AU) of a multichannel analyzer in terms of algebraic logic, and present two AU circuits without flip-flops, with a counting input. The AU is one of the main units of all analyzers with magnetic operative memories (MOM). In analyzers with MOM, the AU carries out the following functions: 1) addition of unity to the number recorded in the memory; 2) discarding the information recorded in the memory; 3) transfer of the number to the output units (oscillograph, printer, or neon indicators). When a detector pulse is received by the analyzer, the standard program of its registration is carried out, consisting of the following: 1) clearing the AU of earlier information; 2) reading the number from the corresponding memory channel ant transfering this number in parallel code to the AU, where it should be remembered for a certain time; 3) addition of unity to the number read from the memory; 4) recording the newly obtained

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L 33993-66

ACC NR: AR6017198

number in the memory. To discard the information from the memory, the AU sends inhibition pulses into all the digits of the memory. When the number is transfered to the read-out devices, the same program is carried out, but without addition of unity. An exception is the print-out mode, when the binary code is transformed into a decimal code by the complementary method. L. S. [Translation of abstract]

SUB CODE: 20, 09

Card 2/2

SOV/120-59-2-26/50

AUTHORS: Barilko, Sh.I., Gorn, L.S. and Khazanov, B.I.

TITLE: An Economical Scaler Based on Magnetic Cores (Ekonomichnoye pereschetnoye ustroystvo na magnitnykh serdechnikakh)

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 2, pp 91-94 (USSR)

ABSTRACT: Toroids with five windings are used with transistors to give a scale of 10 that uses no current in the absence of a signal; the power consumption is 4 mW/kc. The system is a development from one suggested by Milnes (Ref 4) in which the units are blocking oscillators based on ferrite cores with rectangular hysteresis loops; these oscillators have two stable states. The ferrite used has a coercive force of only 0.1 oersted, so the coils have only between 10 and 30 turns (Fig 4 shows the circuit). The switching time is about 2 msec, but effects in the transistors limit the resolving time to about 5 msec. The device works reliably over the range from -40 to +60 oC, although the threshold falls linearly with temperature (because the hysteresis loops become narrower). A plug-in unit built up on this basis is

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An Economical Scaler Based on Magnetic Cores

shown in Fig 5. The stored information is not lost even if the power is disconnected, but additional circuits are required if the stored data must be read off.

There are 5 figures and 4 references, all of which are English.

Card 2/2

SUBMITTED: February 26, 1958

BR

ACCESSION NR: AR4032153 S/0058/64/000/002/A016/A016

SOURCE: Ref. zh. Fiz., Abs. 2A174

AUTHORS: Barilko, Sh. I.; Vankov, I. D.

TITLE: Current switching unit for magnetic operative ferrite-core memory with two-dimensional access

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern. radioelektronike. T. 2. Ch. 1. M., Gosatomizdat, 1963, 144-154

TOPIC TAGS: current switching unit, magnetic ferrite core memory, reading current generator, writing current generator, address current switching, pulse height analyzer, time analyzer, multichannel analyzer

TRANSLATION: A current switching device is proposed, in which the address lines of the operative memory are connected directly in the

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ACCESSION NR: AR4032153

circuits of the reading and writing current generators. The switching of the address current is with the aid of diode-transformer rectifiers. The characteristics of four current switching devices for one of the coordinates of a 256-number magnetic operative memory are analyzed. Formulas are presented for the calculation of the number of elements in each of the current switching devices, for a magnetic operative memory of any capacity. The schematic diagram of the diode-transformer part of the current unit is given. The circuits described afford higher reliability because of the identity of the currents in the address lines and the small number of elements, and can be effectively used in multichannel pulse-height and time analyzers. Vacuum tubes are employed. Analogous transistorized circuits are presently under development. Yu. Semenov.

DATE ACQ: 31Mar64 SUB CODE: SD, CP ENCL: 00

Card 2/2

L 12474-65 EWT(d)/EEC(k)-2/EED-2/EWP(1) Po-4/Pq-4/Pg-4/Pk-4 IJP(c)/ESD/
ASD(a)-5/AFTC(b)/ASD(d)/ESD(dp) BB/GG
ACCESSION NR: AP4047473 S/0120/64/000/005/0126/0129

AUTHOR: Barilko, Sh. I.; Anisimov, A. P.; Vankov, I. D.; Kim Gen' Chun

TITLE: Address driver for ferrite-type storage 16C B

SOURCE: Pribory* i tekhnika eksperimenta, no. 5, 1964, 126-129

TOPIC TAGS: storage, computer storage, address driver, ferrite type storage, AI-256 address driver

ABSTRACT: A transistorized address driver is described in which diode-gate transformers are used only for switching, the sources of readout and recording currents are connected directly to the address trunks, and no preliminary address decoder is used. The switching of bipolar current pulses passing through loads Z_1 and Z_2 (address trunk of the storage cube) is effected by a diode transformer gate shown in Fig. 1 of the Enclosure. A laboratory model of the driver for 256 numbers was in tentative operation for over a year and demonstrated its high reliability. The number of components in the driver is:

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ACCESSION NR: AP4047473

	transformers	diodes	transistors
In experimental model	24	96	16
In earlier AI-256 driver	32	128	64

The new driver has one disadvantage in that no sequence of readout (or recording) cycles is permissible; in other words, each readout cycle must be followed by a recording cycle. Orig. art. has: 6 figures and 3 tables.

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy (Joint Nuclear Research Institute)

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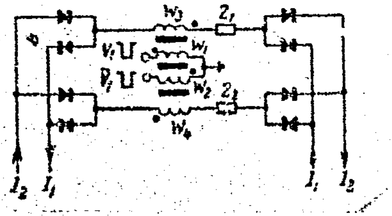

Fig. 1. Diode-transformer gate

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